

**AMENDMENTS TO THE SPECIFICATION:**

Please replace the paragraph beginning on p.10 at line 22 with the following amended paragraph:

In the case in which the possible symbols  $s$  conform to an 8-PSK symbol constellation, as explained in co-pending U.S. Patent Application Serial No. ~~To Be Determined, Howrey Dkt. No. 01827.0049.00US00~~ 09/815,149, which is hereby fully incorporated by reference herein as though set forth in full, a branch metric for a branch in the trellis corresponding to a received symbol  $r$  and a hypothesized symbol  $s$  may be expressed as follows:

$$\frac{rs^* + r^*s}{2\sigma^2} \quad (9)$$

where  $*$  indicates the complex conjugate operation,  $r$  and  $s$  are both complex symbols, and  $\sigma^2$  is the variance of noise introduced due to transmission through a communications channel.